This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1.    (Currently Amended) A patient physiologic monitoring assembly comprising:

a plurality of sensors generating a real-time physiologic data stream, said real-time physiologic data stream including a plurality of physiologic variables; ~~and~~

a first logic rule set including a plurality of logic rules for interpreting the plurality of physiologic variables;

a second logic rule set including a plurality of logic rules for interpreting the physiologic variables; and

a controller receiving said real-time physiologic data stream, said controller including a logic adapted to

cross reference said plurality of physiologic variables with ~~a~~the first logic rule set and second logic rule set; and~~, said logic rule set including a plurality of logic rules; and~~

generate at least a first~~a plurality of~~ diagnostic interpretations of said plurality of physiologic variables utilizing said first logic rule set and a second diagnostic interpretation of said plurality of physiologic variable utilizing the said second logic rule set.

2.    (Currently Amended) A patient physiologic monitoring assembly as described in claim 1, wherein said logic is further adapted to display said first ~~plurality of~~and second diagnostic interpretations on a display element.

3.    (Currently Amended) A patient physiologic monitoring assembly as described in claim 1, wherein said logic is further adapted to select said first logic rule set and said second logic rule set from a rules database, said rules database including a plurality of logic rule sets.

4.    (Cancelled)

5.      (Currently Amended) A patient physiologic monitoring assembly as described in claim 3~~1~~, wherein said logic is further adapted to modify one of said plurality of logic rules within said first logic rule set.


6.      (Original) A patient physiologic monitoring assembly as described in claim 5, wherein said modification comprises editing one of said plurality of logic rules.


7.      (Original) A patient physiologic monitoring assembly as described in claim 5, wherein said modification comprises deleting one of said plurality of logic rules.


8.      (Original) A patient physiologic monitoring assembly as described in claim 5, wherein said modification comprises adding a new logic rule to said first logic rule set.


9.      (Currently Amended) A patient physiologic monitoring assembly as described in claim 3~~1~~, wherein said logic is further adapted to add a new logic rule set to a~~said~~ rules database.


10.     (Original) A patient physiologic monitoring assembly as described in claim 1, further comprising a plurality of networked medical facilities in communication with said controller such that said first logic rule set may be received from any of said plurality of networked medical facilities.


11.     (Currently Amended) A method for providing diagnostic aid to a clinician monitoring the medical condition of a patient, the method~~a subject~~ comprising:

storing a plurality of rule-based algorithms that can generate different ~~responses~~diagnostic interpretations;

acquiring data relating to the patient from at least one sensor;

determining at least one~~which~~ rule based algorithm to apply based upon the acquired data;

~~acquiring data relating to the subject from a sensor;~~ applying at least one of the plurality of the rule-based algorithms <u>to the acquired</u>~~based on the~~ data;

~~and~~ generating a <u>diagnostic interpretation</u>~~response~~ based on the application of at least one of the plurality of rule-based algorithms <u>to the acquired data; and</u>

<u>displaying the diagnostic interpretation to the clinician.</u>

12.    (Currently Amended) The method of claim 11, wherein determining which algorithm to apply comprises displaying a list of choices to a <u>clinician</u>~~user~~ and receiving a <u>clinician</u>~~user~~ input indicative of a selection made by the ~~user~~<u>clinician</u>.

13.    (Currently Amended) The method of claim 11, wherein determining which rule-based algorithm to apply comprises receiving data relating to a characteristic of <u>the patient</u>~~a subject~~, and selecting a rule-based algorithm to apply based on the <u>electronic logical analysis of the</u> received data relating to the characteristic of the <u>patient</u>~~subject~~.

14.    (Currently Amended) The method of claim <u>13</u>~~11~~, wherein acquiring data relating to the <u>patient</u>~~subject from a monitor~~ comprises acquiring vital signs data ~~relating to a patient~~.

15.    (Cancelled)

16.    (Currently Amended) The method of claim ~~11~~<u>59</u>, further comprising<u>:</u>

<u>storing the plurality of rule-based algorithms at a remote location; and</u>

transferring <u>a</u>~~the~~ rule-based algorithm that is <u>to be applied from the remote location</u>~~stored~~.

17.    (Original) The method of claim 11, wherein generating a response based on the application of at least one of the plurality of rule-based algorithms comprises generating an alarm.

18.    (Cancelled)

19.     (Currently Amended) The method of claim 11, wherein determining <u>at least one</u><s>which</s> rule-based algorithm to apply comprises determining to apply a plurality of rule-based algorithms.

20.     (Currently Amended) The method of claim <u>19</u><s>11</s>, wherein generating a response <s>is</s><u>based on the application of at least one of the plurality of rule-based algorithms comprises generating a response</s> based on <s>all of the rule-based algorithms applied</s><u>applying a plurality of rule-based algorithms</u>.

21.     (Currently Amended) A method for <u>diagnosing the medical condition of a patient, the method</u><s>generating a response relating to a subject</s> comprising:

        acquiring <u>patient</u> data<u>;</u> <s>from at least one sensor coupled to the subject;</s>

        applying <u>a rule set comprising</u> a plurality of rule-based algorithms <u>to the acquired patient data</u>; <s>and</s>

        generating a plurality of <u>diagnostic</u> interpretations of the <u>patient</u> data based on the application of the plurality of algorithms<u>;</u>

        <u>evaluating the plurality of diagnostic interpretations to determine the medical condition of the patient; and</u>

        <u>selecting a diagnosis of the medical condition of the patient from the plurality of diagnostic interpretations.</u>

22.     (Currently Amended) The method of claim 21, further comprising generating an alarm based on the <s>plurality of responses</s><u>application of the plurality of algorithms</u>.

23.     (Cancelled)

24.     (Currently Amended) The method of claim 21, wherein <u>acquiring patient</u><s>inputting</s> data <s>relating to the subject</s> comprises acquiring physiological data relating to the <s>subject of interest</s><u>patient</u> from at least one sensor coupled to the subject.

25.     (Currently Amended) The method of claim 24~~21~~, wherein acquiring patient data~~inputting data relating to the subject~~ comprises acquiring data from a database record relating to the subject.

26.     (Currently Amended) The method of claim 21, further comprising:

storing a plurality of rule sets, each rule set comprising a plurality of rule-based algorithms that can be used to generate different responses; and

determining which of the ~~plurality of rule-based algorithms~~rule sets to apply.

27.     (Currently Amended) The method of claim ~~21~~24, wherein acquiring data from at least one sensor comprises acquiring data from a plurality of sensors, the plurality of sensors configured to acquire data relating to a plurality of physiologic variables.

28.     (Currently Amended) The method of claim 21, ~~wherein the plurality of responses are used to generate a certainty score~~further comprising generating a certainty score for each of the diagnostic interpretations.

29.     (Currently Amended) A method for monitoring the medical condition of a patient~~a subject~~, comprising:

storing a plurality of rule-based algorithms that each produce a separate diagnostic interpretation when applied to physiological data;

acquiring physiological data from more than one sensor coupled to the patient~~subject~~, the sensors ~~inputting~~acquiring physiological data relating to more than one patient characteristic, ~~of the subject~~

based on the acquired physiological data, selecting a plurality of the stored rule-based algorithms;

applying the selected~~data to~~ a plurality of rule-based algorithms to the acquired physiological data; and

generating a plurality of <u>diagnostic interpretations</u>~~responses~~ based on the application

of the data to the <u>plurality of</u> rule-based algorithms.


30.    (Currently Amended) The method of claim 29, wherein ~~generating a response based~~

~~on the application of at least one of the rule-based algorithms~~<u>the plurality of diagnostic</u>

<u>interpretations</u> includes ~~generating~~ a value for at <u>least one patient</u> characteristic ~~being~~

~~monitored based on the acquired data from more than one sensor~~.


31-32. (Cancelled)


33.    (Currently Amended) A system for using rule-based algorithms, comprising:

a data storage device configured to store rule-based algorithms;

<u>a data acquisition device configured to acquire data from a patient;</u>

<u>a controller that receives and processes the acquired data;</u>

<u>a first logic configured to select a rule-based algorithm from the data storage device to</u>

<u>be applied to the acquired data;</u>~~and~~

<u>a network communicatively connecting the data storage device and the controller, and</u>

a network interface configured to transfer the <u>selected</u> rule-based algorithm[[s]] across ~~a~~<u>the</u>

network <u>from the data storage device to the controller;</u>~~,~~ <u>and</u>

<u>a second logic configured to apply the data acquired from the patient to the selected</u>

<u>rule-based algorithm,</u> the <u>selected</u> rule-based algorithm being usable in a system configured

to accept rule based algorithms written by unrelated entities<u>;</u>

<u>wherein the controller uses the selected rule-based algorithm to produce a diagnostic</u>

<u>interpretation.</u>


34.    (Cancelled)


35.    (Currently Amended) The system of claim <u>33</u>~~34~~, <u>wherein</u>~~comprising a controller~~

~~having a logic that allows~~ rule-based algorithms <u>may</u>~~to~~ be added <u>or</u>~~and~~ removed from a

~~list~~the plurality of rule-based algorithms stored on the data storage device~~to be applied to the data~~.

36-37. (Cancelled)

38.    (Original) The system of claim 33, further comprising a bill generator configured to generate a bill based on transferring of rule based algorithms.

39-41. (Cancelled)

42.    (Currently Amended) The method of claim 63~~41~~, wherein the predetermined condition is payment of a fee.

43-44. (Cancelled)

45.    (Currently Amended) The method of claim 63~~39~~, wherein transferring the rule-based algorithm across a network comprises transferring the rule-based algorithm from a source outside a health care facility's network to a source related to the health care facility.

46-50. (Cancelled)

51.    (Currently Amended) The monitoring system of claim 64~~50~~, wherein the user interface facilitates transferring rules-based algorithms from a system outside of a health care facility's network.

52.    (Cancelled)

53.    (Currently Amended) The method of claim 66~~52~~, wherein the diagnostic interpretation is made based on an abnormal trend identified by applying the data to the rule-based algorithm.

54-55. (Cancelled)

56.    (Currently Amended) The method of claim 66~~52~~, further comprising increasing or decreasing the number of rule-based algorithms to apply.

57.    (Currently Amended) The method of claim 66~~52~~, further comprising transferring in a rule-based algorithm to apply.

58.    (Cancelled)

59.    (New) The method of claim 11, further comprising:
       applying a second rule-based algorithm to the acquired data;
       generating a second diagnostic interpretation based on the application of the second rule-based algorithm; and
       displaying the second diagnostic interpretation to the clinician.

60.    (New) The method of claim 30, further comprising:
       displaying the plurality of diagnostic interpretations to a clinician;
       prompting the clinician for a selection of one of the plurality of diagnostic interpretations; and
       receiving a selection from the clinician of one of the plurality of diagnostic interpretations.

61.    (New) The method of claim 60, further comprising providing a certainty score for each of the plurality of displayed diagnostic interpretations.

62.    (New) The method of claim 61, further comprising selecting a new plurality of rule-based algorithms based upon the diagnostic interpretations selected by the clinician; and

applying the new plurality of rule-based algorithms to the physiological data to produce a new diagnostic interpretation.

63.    (New) A method for supplying rule-based algorithms for use in a medical monitor monitoring the condition of a patient comprising:

storing a plurality of rule-based algorithms at a plurality of data storage locations comprising a local data storage and at least one data storage, the at least one remote data storage comprising at least one data storage outside of an information network of a healthcare facility;

collecting patient information;

transferring at least one rule-based algorithm across a communications network connecting the plurality of data storage locations with the medical monitor if the patient information meets a predetermined condition;

acquiring physiological data from at least one sensor coupled to the patient;

applying the transferred rule-based algorithms to the acquired physiological data to produce at least one diagnostic interpretation.

64.    (New) A monitoring system for monitoring the medical condition of a patient, comprising:

at least one data storage device comprising a plurality of rule sets, each rule set comprising a plurality of rule-based algorithms, at least one rule-based algorithm being written by an unrelated group;

a patient monitor comprising a plurality of sensors attached to the patient for collecting physiological data;

a communications network connecting the at least one data storage device and the patient monitor;

a user interface configured to facilitate the transfer of at least one rule set across the network;

a logic configured to apply at least one rule set to the physiological data to produce at least one diagnostic interpretation.

65.    (New) The system of claim 64 wherein the user interface is configured to facilitate the transfer of at least two rule sets, and the logic is configured to produce at least one diagnostic interpretation for each rule set applied to the physiological data.

66.    (New) A method of monitoring a patient, comprising:

acquiring data from a plurality of sensors that are coupled to a patient;

selecting a first rule set comprising a first plurality of rule-based algorithms based on the acquired data;

applying the first rule set to the acquired data to produce a first plurality of diagnostic interpretations;

displaying the first plurality of diagnostic interpretations;

receiving a selection of one of the plurality of diagnostic interpretations;

selecting a second rule set comprising a second plurality of rule-based algorithms based on the selected diagnostic interpretations;

applying the second rule set to the acquired data to produce a second plurality of diagnostic interpretations; and

displaying the second plurality of diagnostic interpretations.

67.    (New) The method of claim 66, wherein displaying the first or second plurality of diagnostic interpretations comprises displaying a certainty score for each diagnostic interpretation of the plurality of diagnostic interpretations.